Only a single half-grown right valve. It is very much shorter than the specimen figured, being quite as high as long. The form becomes proportionally longer with age, as the growth posteriorly is more rapid than ventrally.

Tellina parvula, Smith.

Tellina parvula, Smith, Ann. & Mag. Nat. Hist. 1895, vol. xvi. p. 10, pl. ii. fig. 3.

Hab. Off Colombo, in 675 fathoms.

The single specimen is rather larger than the type, being 18½ millim, in length and 13 in height.

Scrobicularia ceylonica.

Testa inæquilateralis, alba, nitida, lineis incrementi striata, lunulata; valvæ tenues, mediocriter profundæ, antice late curvatæ, postice breviores, subacuminatæ, anguste hiantes; margo dorsi anticus leviter concavus, parum descendens, posticus valde obliquus; margo ventris pone medium subincurvatus; lunula angusta, lanceolata; ligamentum externum 5 millim. longum, internum parvum, angustum, obliquum; dens cardinalis unicus in utraque valva plus minus bifidus; dentes laterales nulli; pagina interna radiatim substriata; sinus pallii latus, profundissimus.

Longit. 21 millim., alt. 17, diam. 9.

Hab. Off Colombo, in 675 fathoms.

The internal ligament is quite separated from the external one.

Dosinia salebrosa, Römer.

Dosinia salebrosa, Römer, Proc. Zool. Soc. 1860, p. 122; Novitates Conch. p. 50.

Hab. Malacca (Römer); west of Cochin, lat. N. 9° 34′ 57″, long. E. 75° 36′ 30″, in 406 fathoms.

A single specimen, a little smaller than the type, but similar in other respects, is all that was obtained.

LVI.—On a Collection of Moths from East Africa formed by Dr. W. J. Ansorge, Medical Officer to the Uganda Administration. By W. F. Kirby, Assistant in Zoological Department, British Museum (Natural History).

[Plate XIX.]

During Dr. Ansorge's travels in some little-visited parts of East Africa in 1893-1895 he formed a collection of moths, among which were several new or rare species. In the present paper I publish a full list of the Sphinges, Bombyces, and Noctuæ, and of those Geometræ concerning which any infor-

mation on habits and localities was available.

Dr. Ansorge has kindly presented types of the new species (several of which, at his special request, have been named after himself and his family) to the Natural-History Museum.

Cydimonidæ.

CYDIMONINÆ.

1. Chrysiridia cræsus.

Thaliura cræsus, Gerstaecker, Arch. f. Nat. xxxvii. p. 361 (1871); Von der Decken's Reisen, iii. (2) p. 383, pl. xvi. fig. 4 (1873).

Bogomoyo; from Dr. Charlesworth, June 1893.

Three very brightly coloured specimens.

Agaristidæ.

2. Hespagarista echione.

Agarista echione, Boisduval, in Delegorgue, Voy. en Afr. Austr. ii. p. 595, n. 115 (1847).

Magwangwara, German East Africa.

Seven specimens, captured between Jan. 8 and Jan. 13, 1894.

3. Xanthospilopteryx superba.

Eusemia superba, Butler, Ann. & Mag. Nat. Hist. (4) xv. p. 141, pl. xiii. fig. 3 (1875).

Magwangwara, German East Africa, Jan. 11 and 18; Mtoto Andai, May 5; Kibwezi, May 7, 1894.

Six specimens obtained, differing considerably in size and intensity of colour.

4. Xanthospilopteryx fatima.

Xanthospilopteryx fatima, Kirby, Trans. Ent. Soc. Lond. 1891, p. 288, pl. xv. fig. 2.

Kilungu, April 12, 1894. One specimen only.

5. Ægocera triplagiata. (Pl. X1X. fig. 1.)

Ægocera triplagiata, Rothschild, Novitates Zoologicæ, iii. p. 95 (1896).

Magwangwara, German East Africa, Jan. 11, 1894. Three specimens obtained.

5 a. Ægocera triplagiata, var. (?) n. dispar.

Exp. 62 millim.

Body smoky brown; abdomen lighter; front orbits and several spots on the thorax white; palpi porrect, the second joint densely clothed with hair beneath, the hairs black at the base and orange below; proboscis rufous; front legs with the tibiæ densely clothed with orange hairs, except at the base and tip; middle tibiæ marked with orange above near the base and at the middle; hind legs grey; all the tarsi reddish beneath and the hind tibiæ with a pair of very strong terminal spurs, and another long spine about the middle.

Fore wings black, with three transverse white bands, the first near the base, ampulliform, truncated above and rounded below, running obliquely from above the subcostal nearly to the submedian nervure; the second stripe is shorter, truncated above and below, and running between the subcostal nervure and the point where the median nervure forks; the third with nearly parallel sides and extending obliquely from below the costa nearly to the hinder angle; there are some blue lines between and beyond the white bands, more or less continued towards the submedian nervure, especially that between the two outer bands. Hind wings black, the base white to beyond the middle and the fringes whitish. Underside nearly as above; the frenulum reddish, very large, its apex lying below a tuft of buff scales near the base of the inner margin of the fore wings.

There are more scattered blue and white scales on the

wings, but the specimens are not in perfect condition.

Four specimens of this insect were taken at the same time and place as *Æ. triplagiata*, which it resembles greatly, except in colour, and of which it is in all probability a dimorphic form.

6. Protoceræa Geraldi, sp. n. (Pl. XIX. fig. 3.)

Exp. 33 millim.

Male.—Head and thorax dark brown above; sides of head and middle of thorax crested with white; abdomen and under surface orange-tawny; abdomen with a raised crest at the base above, and with tufts on the sides and at the extremity; antennae wanting; front legs with black tarsi (the four hind legs wanting).

Fore wings deep red, costa blackish, fringes brown; five white spots, the first oblong, oblique, at the base of the costa; the second small, triangular, subcostal; the third below it,

between the median and submedian nervures, large, round, slightly bordered with black; the fourth and fifth irregularly rotund, resembling the third, nearer the hind margin; between and beyond these white spots are some bluish dashes. Hind wings orange, with broad blackish-brown borders and brown fringes. Fore wings beneath dark brown, with some tawny tufts at the base; the first and third spots are obsolete and the fourth and fifth are connected, the lower one forming an irregular band beneath the upper one, with two deep indentations on its inner side.

One specimen taken at Narogare, Uganda Protectorate,

May 19, 1894.

Ållied to *P. albigutta*, Karseh, from Lower Guinea (?), but in that species the fore wings are described as black, apart from other differences.

7. Charilina amabilis.

Noctua amabilis, Drury, Ill. Ex. Ent. ii. pl. xiii. fig. 3 (1773).

Athi Plain, April 18, 1894; Magwangwara, German East

Africa, Jan. 4, 1894.

This is a somewhat variable species, found on both sides of Africa; but the four specimens in the present collection are of rather larger average size than those in the Natural History Museum, measuring from 32 to 41 millimetres in expanse. The smallest specimen before me is from Zomba (Johnston) and measures only 30 millim. West-African specimens usually measure about 32 to 35 millim.

Four specimens obtained.

8. Metagarista triphænoides.

Metagarista triphænoides, Walker, List Lep. Ins. B. M. i. p. 61. n. 1 (1854).

Port Alice, June 30, 1894.

This is the true *M. triphænoides* of Walker, with bluish markings on the inner margin of the fore wings, and the fore wings dusted with grey. The underside of the fore wings is yellowish orange, with a large black spot in the cell, and a subapical white band, bordered within with black; the apex of the wing is reddish. Walker's type is from an unknown locality, but the British Museum has other specimens from Aburi. Walker placed with his type a specimen of *M. mænas*, Herrich-Schäffer, from Ashanti, which was subsequently figured by Dr. Butler as *M. triphænoides*; but the fore wings want the blue markings and the grey dusting above, and the under surface is totally different. There is a second spot at

the end of the cell, and the white band is wholly wanting, there being nothing but indistinct brownish submarginal spaces between the nervures, at five sixths of the length of the wing, fading away on the margins; and on the underside of the lind wings there are merely some blackish submarginal lunules towards the costa and anal angle, instead of the distinctly marked brown and reddish border of M. triphænoides.

Zygænidæ.

Zygæninæ.

9. Zygana semihyalina, sp. n. (Pl. XIX. fig. 5.)

Exp. al. 29-30 millim.

Head green; antennæ reddish brown, white towards the tips; thorax reddish brown, scaled with bluish green above; abdomen coppery green. Wings cupreous, bluish green at the base and along the costa and inner margin: fore wings with 5 large transparent spots—one in the cell, a much larger curved one below the cell, another towards the apex, and two between the median nervules; a conspicuous white marginal spot just below the apex: hind wings with a large vitreous spot filling up most of the basal area, and another beyond, only separated by a nervure.

Port Alice, June 30, 1894.

Two specimens in poor condition. Allied to Z. marina, Butl., but with much larger vitreous spots.

$T_{HYRETINÆ}$.

10. Megnaclia sippia.

Naclia (?) sippia, Plötz, Stett. ent. Zeit. xli. p. 78 (1880).

Port Alice, July 19, 1894; Eldoma Ravine, Jan. 16, 1895.

Three specimens obtained.

This curious species, though little known and scarce in collections, appears to be widely distributed in Africa. Plötz described it from the Cameroons; the Natural History Museum possesses a specimen from Old Calabar, and it has now been obtained in East Central Africa.

EUCHROMIINÆ.

11. Euchromia Folletii.

Glawopis Folletii, Gray, in Griffith's Anim. Kingd. xv. pl. cxx. fig. 10 (1833).

Mozambique, July 12, 1893.

Arctiidæ.

PHÆGOPTERINÆ.

12. Metarctia rufescens.

Metarctia rufescens, Walk. List Lep. Ins. Brit. Mus. iii. p. 769. n. 1 (1855).

One specimen, Mozambique, Nov. 8, with eggs.

SPILOSOMATINÆ.

13. Alpenus purus, var.

Alpenus purus, Butl. Proc. Zool. Soc. Lond. 1878, p. 382.

Magwangwara, German East Africa, Jan. 14, 1894. One specimen, more heavily spotted than typical specimens from British East Africa.

ARCTIINÆ.

14. Callimorpha bellatrix.

Callimorpha bellatrix, Dalman, Anal. Ent. p. 50. n. 26 (1823).

Mano, Kondeland, Lake Nyasa, Nov. 2, 1893. One specimen.

15. Callimorpha Thelwalli.

Hypercompa Thelwalli, Druce, Proc. Zool. Soc. Lond. 1882, p. 779, pl. lxi. fig. 1 (1883).

Mano, Kondeland, Lake Nyasa, Nov. 2, 1893. One specimen.

Cymbidæ.

16. Earias annulifera (?).

Earias annulifera, Walker, List. Lep. Ins. Brit. Mus. xxxv. p. 1774 (1866).

Mozambique, July 12, 1893.

One specimen. The type of E, annulifera was received from Java.

Lithosiidæ.

17. Sozusa eborella (?).

Lithosia eborella, Boisduval, Delegorgue, Voy. Afr. Austr. ii. p. 597. n. 129 (1847).

Magwangwara, German East Africa, Jan. 17, 1894.

A damaged specimen, possibly belonging to this common South-African species.

18. Utetheisa pulchella.

Tinea pulchella, Linn. Syst. Nat. (ed. x.) i. p. 534. n. 238 (1854).

Parumbira, Lake Nyasa, Nov. 7, 1893; Ndi, March 30, 1894.

Six specimens were obtained of this widely distributed species.

19. Argina amanda.

Enchelia amanda, Boisduval, Delegorgue, Voy. Afr. Austr. ii. p. 597. n. 133 (1847).

Deiopeia ocellina, Walker, List Lep. Ins. Brit. Mus. ii. p. 571. n. 9 (1854).

Var. Deiopeia cingulifera, Walker, l. c. p. 569. n. 17 (1854).

Uganda (Capt. Williams), June 1893; Mozambique, July 12, 1893; Parumbira, Lake Nyasa, Oct. 25-Nov. 8, 1893; Dar-es-Salam, Jan. 30, 1894.

A very large series of this conspicuous moth, representing

both forms noted above.

Hypsidæ.

20. Egybolia Vaillantina.

Bombyx Vaillantina, Stoll, Suppl. Cram. Pap. Exot. pl. xxxi. fig. 3 (1790).

Mozambique, July 12, 1893; Magwangwara, German East Africa, Jan. 4 and 19; Kilwa, Jan. 20; Mombasa, March 17; Uganda, Dec. 30, 1894.

Nyctemeridæ.

21. Aletis Ethelinda, sp. n.

Exp. al. 52-64 millim.

Body black above, with three rows of white spots; a transverse streak below the antennæ and a central spot beneath (in the male), the whole face in the female, the under surface of the head and abdomen, and the hinder orbits orange-tawny; pectus spotted and legs streaked with white; antennæ in male strongly pectinated. Wings deep orange-red, as in A. helcita &c., with broad black borders: fore wings with a large oblique subapical white band and three spots (sometimes traces of a fourth) below: hind wings with rather small oyal

spots on the nervures in the middle of the border, 5 in the male and 6 or 7 in the female.

Parumbira, Lake Nyasa, Nov. 8-10, 1894.

Seven specimens obtained. Closely allied to A. monteironis, Butl., from Delagoa Bay, except in colour. Druce does not mention the peculiar washed-out colour of A. monteironis in his description, but it is shown in the figure in Waterhouse's 'Aid,' ii. pl. clxxii. fig. 2.

22. Aletis Erici, sp. n.

Exp. 65 lin.

Female.—Body black; head and thorax spotted with white; abdomen with three rows of white spots above; legs reddish; proboscis and abdomen beneath orange-tawny. Wings rather pale orange-tawny (perhaps faded): fore wings with a broad black border, with a broad oblique subapical white band and 3 white spots below it, the first linear: hind wings with a rather narrow black border marked with 7 or 8 moderate-sized white spots on the nervures.

Port Alice, July 19, 1894.

23. Pitthea trifasciata.

Pitthea trifasciata, Dewitz, Verh. Leop.-Carol. Akad. xlii. p. 82, pl. iii. fig. 3 (1881).

Uganda, Dec. 29, 1894. Several specimens obtained.

24. Secusio parvipuncta.

Secusio parvipuncta, Hampson, Ill. Lep. Het. B. M. viii. p. 46, pl. exxxix. fig. 16 (1891).

Tsavo, April 2, 1894.

One specimen only. A common species in India and East Africa.

Genus Neuroxena, nov.

Body moderately slender; head and abdomen narrower than the thorax. Antennæ slender, slightly serrated. Palpi extending a little beyond the head, the last joint conical and pointed. Fore wings oval, the costa arched; the hind margin regularly curved, hardly oblique, the angles rounded off. Hind wings rounded, as broad and nearly as long as the fore wings. Fore wings with the subcostal nervure apparently 5-branched, but difficult to distinguish owing to the dense scaling. Cell very long and broad, bisected by a

nervure; upper discoidal nervure forking at the upper end of the cell from the subcostal nervure; median nervure emitting the lowest branch at about three fifths of the length of the cell; the middle median nervule and the lower discoidal nervule emitted at equal distances from the upper median nervule and curving away from it; two very distinct parallel submedian nervures running to the hind margin above the hinder angle; they are not bifid at the base, where they converge. Hind wings with the costal and subcostal nervures stalked at the base, and then running parallel to the tip. Cell broad, the first subcostal nervule running obliquely upwards from its extremity, the second nearly straight to the inner margin. Discoidal nervule emitted about the middle of the cell, which is merely bisected by a fold; two upper median nervules forking at the lower end of the cell and the lower one at three fifths of the length of the cell; two, or perhaps three, submedian nervures, but very slender and ill-defined.

This genus appears to be allied to Secusio.

25. Neuroxena Ansorgei, sp. n. (Pl. XIX. fig. 2.)

Fore wings light brown, with the nervures buff towards the base; a uniformly broad oblique pale yellow bar running from below the costa, just before the extremity of the cell, nearly to the hinder angle, ceasing above the lowest submedian nervure just before the hind margin. Hind wings pale orange, shading into reddish on the lower and inner half, and with a black border, gradually narrowed and ceasing at the anal angle. Head black, orbits and mouth reddish; thorax blackish, with long narrow pointed tegulæ, edged on

both sides with reddish. Abdomen reddish, with a row of black spots on the back. Pectus yellow; legs brown.

One specimen taken at Mtebe, July 12, 1894.

26. Nyctemera leuconoë.

Nyctemera leuconoë, Hopfier, Monatsb. Akad. Berl. 1857, p. 422; Peters's Reise Mossamb. v. p. 430, pl. xxviii. fig. 3 (1862).

Uganda (*Capt. Williams*), June 1893; Parumbira, Lake Nyasa, Oct. 25, Nov. 8; Isote, Kondeland, Lake Nyasa, Nov. 5, 6, 1893; Ndi, March 31, Kibwezi, April 7, Port Alice, June 24, 30, 1894.

Many specimens.

Exp. 46 millim.

Liparidæ.

27. Redoa Maria, sp. n.

Exp. 43 millim.

Iridescent white, thinly scaled, subhyaline, with two silvery-white bands on the fore wings, one submarginal and the other running beyond the cell and angulated beneath it; the cell and basal area are also silvery white. Antennæ deeply bipectinated, brownish grey; face and front legs yellowish.

Mtebe, July 12, 1894.

One specimen. Allied to the Indian species R. clara, Walk., and R. rinaria, Moore.

28. Cropera pallida, sp. n. (Pl. XIX. fig. 6.)

Exp. 24-34 millim.

Fore wings pale yellow with a slight orange tint, with three or four irregular and indistinct transverse whitish bands; an orange spot in the middle of the wing and frequently some blackish scaling below it, and traces of one or two blackish spots towards the hind margin. Hind wings pale yellow, unspotted. The female has pale yellow fore wings, hardly varied with whitish, but with the central orange spot; two blackish submarginal spots, one towards the costa and one towards the inner margin; and a greyish-brown tuft at the extremity of the abdomen.

Four specimens.

Noted as abundant on the coast at Mozambique in 1893: the Natural History Museum has specimens from Natal and Delagoa Bay.

29. Olapa fulvinotata.

Olapa fulvinotata, Butler, Proc. Zool. Soc. Lond. 1893, p. 678. Magwangwara, German East Africa, Jan. 8, 1894. One specimen.

30. Cypra crocipes.

Cypra crocipes, Boisduval, Faune Madag. p. 87, pl. xii. fig. 2 (1833).

A single specimen labelled "Uganda (Capt. Williams)," apparently identical with this well-known Madagascar species.

31. Rhanidophora phedonia.

Bombyx phedonia, Cramer, Pap. Exot. iv. pl. cccxlvii. fig. C (1782).

Maungu, March 27; Port Alice, June 24; Uganda, Dec. 29, 1894.

Several specimens.

32. Aroa discalis.

Aroa discalis, Walker, List Lepid. Ins. Brit. Mus. iv. p. 792. n. 1 (1855).

Quilemane, Portuguese East Africa, July 23, 1893. One specimen of this common East-African moth.

Limacodidæ.

33. Parasa ætitis.

Tæda ætitis, Wallengren, Wien, ent. Mon, vii. p. 141 (1863); Vetensk, Akad. Handl. (2) v. (4) p. 23 (1865).

Kisokwe (per Rev. Mr. Ashe, June 1893). Two specimens.

Notodontidæ.

34. Rigema Woerdeni.

Phalera Woerdeni, Snell. Tijdschr. Ent. xv. p. 45, pl. iv. figs. 1-3 (1865).

Masongoleni, June 4, 1894. One specimen.

Sphingidæ.

Macroglossinæ.

35. Aëllopus hirundo.

Macroglossa hirundo, Gerstaecker, Arch. f. Naturg. xxxvii. p. 360 (1871); Von der Decken's Reisen, iv. (2) p. 375, pl. xv. fig. 7 (1873).

Ngomeni, April 3, 1894; Kibwezi, Feb. 6, 1895.

36. Macroglossa trochilus.

Psithyrus trochilus, Hübn. Samml. exot. Schmett. ii. pl. clviii. (1824?). Eldoma Ravine, Jan. 16, 1895. One specimen only.

37. Macroglossa trochiloides.

Macroglossa trochiloides, Butler, Proc. Zool. Soc. Lond. 1875, p. 5.

Eldoma Ravine, May 7, 1894.

One specimen. This insect was originally described from Sierra Leone. Dr. Butler is now inclined to doubt whether it is really distinct from *M. trochilus*, Hübner.

AMBULICINE.

38. Nephele viridescens.

Zonilia viridescens, Walker, List Lep. Ins. Brit. Mus. viii. p. 192. n. 1 (1856).

Parumbira, Lake Nyasa, Nov. 11, 1893. One specimen.

Saturniidæ.

39. Gynanisa maia, var. (?)

Saturma maia, Klug, Neue Schmett. pl. v. fig. 1 (1836).

Magwangwara, German East Africa, Jan. 13, 1894. Specimens from Tropical East Africa are larger and paler than those from Natal, and represent a distinct local form, if not a new species.

40. Pseudaphelia apollinaris.

Saturnia apollinaris, Boisduval, Delegorgue, Voy. Afr. Austr. ii. p. 601 (1847).

Magwangwara, German East Africa, Jan. 3-11, 1894. A long series.

41. Saturnia oubie.

Bombyx oubie, Guérin, Lefevre, Voy. Abyss. Zool. vi. p. 387, pl. xii. figs. 1, 2 (1849).

Lake Nakwo, May 3, 1894.

A pair (male and female), showing that the sexes do not differ. They agree with Somali specimens and differ from the figure and description of the type in the transverse pale lines on the wings being white, and not pink.

42. Saturnia ——?

Ekatetok, May 18, 1894.

A very worn male of a species allied to *S. oubie*, Guérin, and *S. Zaddachi*, Dewitz, with a broad yellow border edged with black on the hind wings. The condition of the specimen renders it useless to attempt to describe it.

Genus LASIOPTILA, nov.

Female.—Antennæ moniliform, with about twenty-four joints, the last conical, thickly clothed with very short hair; the joints of nearly uniform length, hardly longer than

broad, and very distinctly separated. Thorax and legs thickly clothed with shaggy hair. Wings very hairy, fringes thick and moderately long: fore wings not much longer than broad, the costa arched towards the extremity, and the hind margin rounded and not very oblique; most hairy along the costa and at the base, where there is a dense mass of raised hair, extending below the median nervure and its lowest branch to beyond the middle of the inner margin: hind wings rounded, with the inner margin concave.

A very distinct genus, allied to *Ludia*, Wallengren (type Saturnia Delegorguei, Boisd.), from which it differs interalia by the totally different colour and pattern, and the much

shorter and broader fore wings.

43. Lasioptila Ansorgei, sp. n. (Pl. XIX. fig. 8.)

Female.—Rich fawn-colour, slightly varied with rosy grey; prothorax grey above, a blackish line at the base of the fringes, edged inside with rosy grey, the fringes slightly paler in the middle and darkest at the extremities; there is also a regularly festooned submarginal line, blackish on the fore wings, and reddish on the hind wings. Fore wings with a slight transverse black dash towards the base, a narrow vitreous lunule bordered with black on both sides, and with the horns turned outwards, at the end of the cell, and a broad black dash suffused above in the middle of the inner margin; on its outer edge the submarginal festooned line runs into it. Hind wings with a narrow black lunule opening outwards and most distinct on the underside, at the end of the cell. Underside irrorated with reddish atoms, except on the disk of the fore wings, and with rows of yellowish hairs along the nervures, which are less conspicuous on the upperside.

Uganda, Dec. 22, 1894. One specimen only obtained.

44. Lasioptila (?) pomona. (Pl. XIX. fig. 9.)

Dreata pomona, Weymer, Stett. ent. Zeit. liii. p. 113 (1892).

Magwangwara, German East Africa, Jan. 8, 1894.

A single male specimen; the type specimen, of which I have seen a drawing in Herr Weymer's possession, is also a male. The generic characters agree in most particulars with *L. selene*, but the insect is smaller and the wings much less densely hairy; the antennæ are about 33-jointed, the joints closely united, rather longer than broad, and deeply bipectinated and ciliated. The end of the cell on all the wings is marked with

a white (or vitreous?) spot bordered with blackish, beyond which is an oblique yellow stripe bordered outside with

brown, but no festooned submarginal line.

I see no reason to regard this moth as the male of *L. selene*; but when these species are better known I expect it will prove to belong to the same genus, or to an allied one.

Lasiocampidæ.

45. Jana Mariana.

Bombyx Mariana, White, Ann. & Mag. Nat. Hist. xii. p. 264 (1843).

Captured October 26.

A female specimen of large size (exp. 150 millim.), but not otherwise differing materially from the type from the Congo.

46. Hibrildes Ansorgei, sp. n. (Pl. XIX. fig. 7.)

Exp. 60 millim.

Female.—Body reddish brown; antennæ strongly bipectinated; face orange; thorax white in front and on the sides; abdomen with an orange band on the back, expanding at the end of each segment, the sides whitish, bordered below with an orange stripe on each side; terminal segment orange. Fore wings smoky hyaline, with black cilia; a blackish mark at the end of the cell, beyond which is a broad white band extending nearly to the lowest median nervule, its lower part connected outwardly with a row of submarginal white spots between the nervures, which do not extend to the costa. Hind wings tawny yellow, with a broad lunule at the end of the cell; a rather narrow black border, marked with six large white spots between the nervures.

Magwangwara, German East Africa, Jan. 19, 1864.

Two specimens obtained.

47. Hibrildes venosa, sp. n. (Pl. XIX. fig. 4.)

Exp. 57 millim.

Male.—Creamy white, subhyaline, with the nervures brown, incrassated, and expanded triangularly before the fringes, which are also brown on the costa and hind margin of all the wings, but white on the inner margins. Fore wings with the costal area yellowish; tips brownish, and throwing off a short brown submarginal band, ceasing on the lowest discoidal nervule, where it turns outward to the margin. The fork of the discoidal nervure before the end of

the cell of the fore wings is shorter than in *II. norax*, Druce. Underside with the costal area on all the wings distinctly yellowish. Antennæ black; head orange; thorax clothed with yellow hair; abdomen reddish.

Magwangwara, German East Africa, Jan. 16 and 19, 1894.

Three specimens obtained.

Allied to *H. norax*, Druce, the type of the genus; but in that species the thorax is white and the wings are also much whiter than in *H. venosa*. It may be the male of *H. Ansorgei*.

48. Lichenopteryx conspersa, sp. n.

Exp. 53 millim.

Male:—Anterior wings and thorax buff; antennæ very long, brown, very deeply bipectinated; head, hind wings, and abdomen ochreous-yellow, the latter with lighter bands; tarsi ringed with black at the base. Head and thorax with long hair, forming a double raised crest on the head, but more depressed on the thorax. Wings very densely clothed with scales and hair: fore wings with many scattered brown and black spots, the latter often punctiform; a suffused blackish band, sloping slightly inwards at about two thirds of the length of the wing: hind wings nearly immaculate above; wings beneath of a uniform greyish buff, with scattered black points on the hind wings except towards the base, and on the fore wings towards the base of the costa, and in a position corresponding to that of the dark band in the upperside. Wings broad, rounded; hind wings nearly as long and broad as the fore wings.

Kisokan River.

Two specimens (a male and female) in very poor condition, especially the latter.

49. Stenoglene obtusa.

Poloma obtusa, Walker, List Lep. Ins. Brit, Mus. xxxii. p. 357 (1865). Maungu, March 16, 1895. One specimen.

Nостиж.

Coradinidæ.

50. Amyna selenampha. Amyna selenampha, Guenée, Noct. i. p. 406 (1852). Mtoto Andai, April 5, 1894.

Acontiidæ.

51. Tarache caffraria.

Noctua caffraria, Cramer, Pap. Exot. ii. pl. cxlvii. fig. F.

Tsavo, April 2, 1894.

One specimen.

Anthophilidæ.

52. Eublemma viridula.

Micra viridula, Guenée, Ann. Soc. Ent. France, x. p. 249, note (1841); Noct. ii. p. 244 (1852).

Isote, Kondeland, German East Africa, Oct. 31, 1893. Also occurs in South Europe.

Toxocampidæ.

53. Plecoptera reversa.

Poaphila reversa, Walker, List Lep. Ins. Brit. Mus. xxxiii. p. 991 (1865).

Magwangwara, German East Africa, Jan. 13, 1894. An unusually brightly coloured female.

Polydesmidæ.

54. Pandesma Quenavadi.

Pandesma Quenavadi, Guen. Noct. ii. p. 438 (1852).

Parumbira, Lake Nyasa, Oct. 25, Nov. 8; Isote, Kondeland, Lake Nyasa, Nov. 6, 1893.

55. Polydesma umbricola.

Polydesma umbricola, Boisd. Faune Madag. p. 108, pl. xiii. fig. 5 (1833).Parumbira, Lake Nyasa, Nov. 6-14, 1893.

Ophideridæ.

56. Argadessa materna.

Noctua (?) materna, Linn. Syst. Nat. (ed. xii.) p. 840. n. 117 (1767). Magwangwara, German East Africa, Jan. 13, 1894.

Ommatophoridæ.

57. Patula Walkeri.

Patula Walkeri, Butler, Ann. & Mag. Nat. Hist. (4) xvi p. 406 (1875). Parumbira, Lake Nyasa, Nov. 16, 1893.

58. Cyligramma latona.

Noctua latona, Cramer, Pap. Exot. i. pl. xiii. fig. B (1775).

Parumbira, Lake Nyasa, Nov. 10, 1893; Magwangwara, German East Africa, Jan. 2; Ndi, British East Africa, April 1894.

Several specimens.

59. Cyligramma limacina.

Erebus limacina, Guér. Icon. R. Anim., Ins. p. 520, pl. lxxxix. fig. 2 (1839-44).

Uganda (*Capt. Williams*), June 1893; Gote, Kondeland, Lake Nyasa, Nov. 6, 1893; Magwangwara, German East Africa, Jan. 18; Masongoleni, April 6, 1894, Feb. 7, 1895; Ndange, April 3, 1895.

Hypopyridæ.

60. Pyramarista rufescens, gen. et sp. n.

Male.—Exp. 81 millim.

Fawn-colour, tinged with rosy on the costa and inner margin of the wings, most broadly on the inner margin of the fore wings and most deeply on the long fringes of the inner margin of the hind wings. Antennæ with a row of short, sharp, triangular teeth on each side, terminating in a slender curved bristle, finely ciliated on the curve. Body and femora clothed with rosy hair; thorax damaged, but the front tufts are rosy and the hinder tufts pale grey. Fore wings with a triangular black spot on the middle of the costa; a brown line crosses the end of the cell, curves outwards, and then slopes obliquely inwards to nearly the middle of the inner margin. A white line, bordered inside with rosy brown, runs from the tip of the fore wings to just within the anal angle of the hind wings. Underside more pink, without markings except the common outer line, which is pink. Legs long, femora very pilose, middle tibiæ with terminal and hind tibiæ with middle and terminal spurs; tibiæ and tarsi armed on the sides and beneath with rows of fine black spines. Abdomen with a small anal tuft.

Allied to *Hypopyra Bosei*, Saalmüller, from Madagascar (which is placed in *Maxula* in the British Museum collection), but its smaller size and rosy tinge give it more the general appearance of some varieties of *Hypopyra vespertilio*, Fabr. The teeth of the antennæ, too, are much more regular and conspicuous, and the joints are very distinctly separated; nor do the antennæ taper as in *H. Bosei*, which, however, should probably form a genus equally distinct from *Maxula* and *Puramarista*.

Parumbira, Lake Nyasa, Nov. 15, 1893.

A single worn specimen; but the species is of so much interest that I was unwilling not to describe it.

61. Maxula africana, sp. n.

Exp. 45-53 millim.

Male.-Wings grey, dusted with black, with a submarginal white stripe running from within the costa of the fore wings to the hinder angle, and from the tip to the anal angle of the hind wings; this line is bordered on both sides with dusky, and is followed on its inner side by a space nearly free from black specks, as is also the cell of the fore wings; the space between this line and the hind margin is darker than the rest of the wings, and there is a row of black spots between the nervures towards the hind margin, and the marginal one is also marked by a darker patch below the middle on all the wings. Fore wings with four black costal spots, increasing in size from the base; the basal one is the outermost of a row of three at the base, progressively smaller and more basal as they descend; under the second are some black dashes towards the inner margin; the third surmounts a very large brown irregularly ampulliform blotch, surrounded by a black line, the neck of which is widened above, and bounds the end of the cell, expanding beneath into the flaskshaped spot; the fourth is followed below by a row of five small black spots (the fourth nearer the margin than the others), which nearly reach the outer edge of the large spot; about the middle of the inner margin is a black dash, forming the commencement of an oblique blackish stripe which crosses the hind wing before the middle; costa and inner margin of the hind wings, including the long fringes of the latter, rosy. Underside orange-tawny, with three rows of black spots, the inner row incomplete on the lower part of the fore wings and on the upper part of the hind wings, and the outer row punctiform; there is a black lunule at the end of the cell of the fore wings, and two small blackish marks at a point

corresponding to the centre of the flask-shaped spot of the upperside; there is also a black spot on the discocellular nervules of the hind wings.

Head and antennæ rufous-brown; thorax and base of abdomen whitish above: abdomen above and most of the body beneath inclining to rosy; femora clothed with thick

reddish hair; tibiæ and tarsi black above.

Female much lighter, especially on the fore wings; the submarginal line and dots present; only the third and fourth of the costal spots of the fore wings visible; the third forms the uppermost of a row of four black spots crossing the end of the cell. Underside with only the submarginal line and the lunule and spot at the end of the cells distinctly visible; body, as well as the wings, only with a very faint rosy tinge; legs brown.

Magwangwara, German East Africa, Jan. 11 and 13, 1894.
Allied to the common and variable East-Indian *M. unistrigata*, Guen., but without the zigzag lines and rows of black dots on the disk which we meet with in that species.

Wallengren describes two species of *Hypopyra* from Caffraria, one of which—*H. miniata*—may prove to be the

female of our Pyramarista rufescens.

62. Entomogramma nigriceps.

Renodes (?) nigriceps, Walker, List Lepid. Ins. Brit. Mus. xv. p. 1595. n. 6 (1858).

Uganda, Dec. 29, 1894.

63. Entomogramma pardus.

Entomogramma pardus, Guenée, Noct. iii. p. 205 (1852).

Mozambique, July 12, 1893.

Ophiusidæ.

64. Sphingomorpha monteironis.

Sphingomorpha monteironis, Butler, Ann. & Mag. Nat. Hist. (4) xvi. p. 406 (1875).

Parumbira, Lake Nyasa, Oct. 23, Nov. 9–14, 1893. Several specimens.

65. Pseudophis tirhaca.

Noctua tirhaca, Cram. Pap. Exot. ii. p. 172, fig. E (1780).

Magwangwara, German East Africa, Jan. 3, 1894.

66. Dysgonia senior.

Ophisma senior, Walker, List Lep. Ins. Brit. Mus. xiv. p. 1376. n. 17 (1858).

Port Alice, June 24, 1894.

67. Achæa Lienardi.

Ophiusa Lienardi, Boisduval, Faune Madag. p. 102, pl. xv. fig. 5 (1833).

Parumbira, Lake Nyasa, Nov. 11 and 14, 1893; Ndi, March 31; Masongoleni, April 6, 1894.

68. Ophiusa algira.

Noctua algira, Linn. Syst. Nat. (ed. xii.) i. (2) p. 835. n. 98 (1767). Kilungu, April 12; Uganda, Dec. 30, 1894.

69. Colbusa euclidica, var.

Colbusa euclidica, Walker, List Lepid. Ins. xxxiii. p. 978 (1865).

One specimen in poor condition from Taligan.

The white band on the fore wings is broader than in the types, and the upper part of the border narrower; but the species appears to be variable, and a larger series is needed before it would be advisable to separate the various forms as distinct.

70. Grammodes geometrica.

Noctua geometrica, Fabricius, Syst. Ent. p. 599. n. 37 (1775). Magwangwara, German East Africa, Jan. 5, 1894.

Euclididæ.

71. Trigonodes hyppasia.

Noctua hyppasia, Cramer, Pap. Exot. iii. pl. ccl. fig. E (1780). Mozambique, July 12, 1893.

72. Drasteria judicans.

Ophiusa judicans, Walker, List Lepid. Ins. Brit. Mus. xv. p. 1831 (1858).

Exact locality not recorded; labelled "298."

Remigiidæ.

73. Remigia archesia.

Noctua archesia, Cram. Pap. Exot. iii. pl. celxxiii. figs. F, G (1780). Mozambique, July 12, 1893; Magwangwara, German East Africa, Jan. 13; Kilungu, April 12; Port Alice, July 19; Uganda, Dec. 29, 1894.

74. Remigia frugalis.

Noctua frugalis, Fabricius, Syst. Ent. p. 601. n. 45 (1775).

Magwangwara, German East Africa, Jan. 11 and 13; Uganda, Dec. 29 (1894).

Hypenidæ.

75. Hypena abyssinialis.

Hypena abyssinialis, Guenée, Delt. & Pyr. p. 39 (1854).

Isote, Kondeland, Lake Nyasa, Nov. 2, 1893; Magwangwara, German East Africa, Jan. 11, 1894.

GEOMETRÆ.

76. Gnophos delosaria.

Tephrosia delosaria, Walker, List Lepid. Ins. xxv. p. 1541 (1862). Isote, Oct. 31.

77. Zamorada reflexaria (?).

Comibana reflexaria, Walker, List Lepid. Ins. Brit. Mus. xxvi. p. 1565 (1862).

Isote, Kondeland, Lake Nyasa, Nov. 6, 1893.

A damaged specimen, apparently belonging to this species.

78. Paraeumelea conspersata, sp. n.

Exp. al. 45 millim.

Pale yellow, thickly speckled with brown, with black discoidal spots; the fore wings are clearer towards the costa, and towards the hind margin the speckled part is bordered by a festooned line, commencing with an outward curve below the costa, followed by two even curves and then by three oblique ones to the inner margin; outside this is a submarginal curved row of blackish dots on the nervures, between which and the festooned line are some irregular brown spots; on the hind wings the line is continued nearly straight, but only for a short distance from the costa, and below it the speckled part of the wing extends outwards as far as three brown festooned submarginal lines, coalescing to two on the costa,

the outer series marked between the nervures with black dots, slightly speckled with silver; the fringes on all the wings are yellowish white, preceded by a brown line. Underside whitish, with the brown markings more clearly defined than above; body brown, with the face yellow, marked with a transverse brown bar; the abdomen is marked with some irregular yellowish patches.

Port Alice, June 24, 1894. Two specimens obtained.

Allied to *P. perlimbata*, Guenée, but that species has orange markings, and a row of long submarginal streaks in place of the brown submarginal lines of *P. conspersata*.

79. Problepsis digammata, nom. nov.

Problepsis diyammata, Warren, MS.

Argyris latonaria, var., Walker, List Lepid. Ins. Brit. Mus. xxiii.
p. 807. n. 2 (1861).

Uganda, Dec. 29, 1894.

80. Negla perplexata.

Negla perplexata, Walker, List Lepid. Ins. Brit. Mus. xxiv. p. 1087. n. 1 (1862).

Port Alice, June 30, 1894.

81. Petovia dichroaria,

Geometra dichroaria, Herrich-Schäffer, Aussereurop. Schmett. i. fig. 169 (1854).

Magwangwara, German East Africa, Jan. 5, 1894. Two specimens obtained.

EXPLANATION OF PLATE XIX.

Fig. 1. Ægocera triplagiata, Rothsch.

Fig. 2. Neuroxena Ansorgei, sp. n.

Fig. 3. Protoceræa Geraldi, sp. n.

Fig. 4. Hibrildes venosa, sp. n. Fig. 5. Zygæna semihyalina, sp. n.

Fig. 6. Cropera pallida, sp. n.

Fig. 7. Hibrildes Ansorgei, sp. n. Fig. 8. Lasioptila Ansorgei, sp. n.

Fig. 9. Lasioptila (?) pomona, sp. n.